

MA

# ► Fax

9/15/2015

From: Michael Gearan  
Phone: 603-966-4578 x120  
Fax: 603-966-4599  
Company Name: Monument Construction LLC, 21 Factory Street, Nashua, NH 03060

Company Name: EPA Region I  
Attn: Environmental Protection Agency  
Phone: (617) 918-1111  
Fax: (617) 918-1809

**Comments:**

Good Morning

Attached please find the EPA – Demo Asbestos Notification Form – Bedford Windows. If you have any other questions please feel free to contact me.

Sincerely,

Michael Gearan

mikeg@monument.us.com

☐ Urgent ☒ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

## Page 1 of 2

Operator Project #		Postmark		Date Received	Notification #	
I. Type of Notification (check one): <input type="checkbox"/> Original <input type="checkbox"/> Revised <input type="checkbox"/> Canceled						
<b>II. Facility Description</b>						
Building Name: Buildings #9, 10, 17, 70, VA Medical Center						
Address: 200 Spring St						
City: Bedford		State: MA		Zip Code: 01730	County: USA	
Site Location: Buildings #9, 10, 17, 70						
Building Size (square feet): culm. 98,339			# of Floors: 11 culm.		Age in Years: unknown	
Present Use: VA Medical Center - Non-Patient Admin			Prior Use: VA Medical Center - Non-Patient Admin			
<b>III. Type of Operation</b> (check one): <input type="checkbox"/> Demo <input type="checkbox"/> Ordered Demo <input checked="" type="checkbox"/> Renovation <input type="checkbox"/> Emergency Renovation <input type="checkbox"/> Fire Training						
<b>IV. Is Asbestos Present?</b> (check one): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No						
<b>V. Facility Information</b>						
Owner Name: VA Medical Center (Contracting - B-3, 4th Floor, Rm B-407)						
Address: 940 Belmont Street						
City: Brockton		State: MA		Zip Code: 02301		
Contact: Carol AhNee		Telephone: (774) 826-1573		Fax:		
Removal Contractor Name: Monument Construction, LLC						
Address: 21 Factory Street						
City: Nashua		State: NH		Zip Code: 03060		
Contact: Padro G. Perez		Telephone: (603) 966-4578		Fax: (603) 966-4599		
Other Operator (demolition/general): Monument Construction, LLC (General contractor)						
Address: 21 Factory Street						
City: Nashua		State: NH		Zip Code: 03060		
Contact: Tim Ignacio		Telephone: (603) 966-4578		Fax: (603) 966-4599		
<b>VI. Procedure, including analytical methods, employed to detect the presence of and to estimate the quantity of RACM and Category I and Category II non-friable ACM:</b> <small>Axiom Partners, Inc. (AXIOM) performed a building materials survey to windows components to identify suspect asbestos-containing materials (ACM), lead-containing paint (LCP) and polychlorinated biphenyls (PCBs). Asbestos using EPA 600/4-93/116 Method using Polarized Light Microscopy LCP tested lead content using Atomic Absorption Spectrophotometry (AAS) under EPA Method SW846-87420/3051. PCB following EPA Method 3420C/R02 found in EPA SW-846.</small>						
<b>VII. Approximate Amount of Asbestos Materials:</b>						
	RACM to be Removed	Non-Friable Asbestos Material to be Removed		Non-friable Asbestos Material NOT to be Removed		
		Category I	Category II	Category I	Category II	
Pipes (linear feet)	Window Caulking	n/a	370 LF	n/a	n/a	
Surface Area (square feet)	Glazing	5,650 SF	n/a	n/a	n/a	
Facility Components (cubic feet)						
<b>VIII. Scheduled Dates Demolition or Renovation:</b> Start: 10/05/15 Complete: 01/08/16						
<b>IX. Dates for Asbestos Removal (MM/DD/YY)</b> Start: 10/05/15 Complete: 12/24/15						
Days of the Week:	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Hours of Operation:	6am - 430pm	6am - 430pm	6am - 430pm	6am - 430pm	6am - 430pm	6am - 430pm

## U.S. EPA NOTIFICATION OF DEMOLITION AND RENOVATION

Page 2 of 2

X.	Description of planned Demolition or Renovation work to be performed and method(s) to be employed, including demolition or renovation techniques to be used and description of affected facility component s:		
	The abatement method will include removal of each sash (which includes glazing), limited selective removal of existing frames will be removed to incorporate installation of replacement window. No walls (structural or non-structural) are designed to be removed		
XI.	Description of work practices and engineering controls to be used to comply with the requirements, including asbestos removal and waste handling emission control procedures:		
	See attached Asbestos Removal Work Plan		
XII.	Waste Transporter #1		
	Name:	Service Transport Group	
	Address:	28 Privilage Street	
	City:	Woonsocket	State: RI Zip Code: 02895
	Contact:	Randy Bridges	Telephone: (401) 766-1824
	Waste Transporter #2		
	Name:		
	Address:		
	City:		State: Zip Code:
	Contact:		Telephone: ( )
XIII.	Waste Disposal		
	Name:	Minerva Enterprises, LLC	
	Address:	8955 Minerva Rd S.E.	
	City:	Waynesburg	State: OH Zip Code: 44688
	Contact:	Frank Stufano	Telephone: (330) 866-3435
XIV.	Emergency Demolition (complete item XIV only if this project is an Emergency Demo.)		
	1. Attach a copy of the Order to this notice.		
	2. Name of Authority Issuing Order:		Title:
	3. Authority of Order (Citation of Code):		
	4. Date of Order (MM/DD/YY):		Date Ordered to Begin
XV.	Emergency Renovation (Attach separate sheet with the following information if project is Emergency Renovation.)		
	1. Date and Hour of the Emergency:		
	2. Description of the Sudden, Unexpected Event:		
	3. Explanation of how the event caused unsafe conditions or equipment damage or an unreasonable financial burden.		
XVI.	Description of procedures to be followed in the event that unexpected RACM is found or non-friable ACM becomes crumbled, pulverized, or reduced to powder.		
	See attached Asbestos Removal Work Plan		
XVII.	I certify that an individual trained in the provisions of NESHAP (40 CFR PART 61, SUBPART M) will be on-site during the Demolition or Renovation, and evidence that the required training has been accomplished by this person will be available during normal business hours.		
	Signature of Owner/Operator	09/18/15 Date	Timothy Ignacio Type or Print Name and Title
XVIII.	I acknowledge the existence of laws prohibiting the submission of false or misleading statements, and I certify that facts contained in this notification are true, accurate, and complete.		
	Signature of Owner/Operator	09/18/15 Date	Timothy Ignacio Type or Print Name and Title



Massachusetts Department of Environmental Protection

## **eDEP Transaction Copy**

Here is the file you requested for your records.

To retain a copy of this file you must save and/or print.

Username: **MONUMENT**

Transaction ID: **774668**

Document: **AQ04-Asbestos Removal Notification Form ANF-001**

Size of File: **100.77K**

Status of Transaction: **Submitted**

Date and Time Created: **9/17/2015:9:55:39 AM**

**Note:** This file only includes forms that were part of your transaction as of the date and time indicated above. If you need a more current copy of your transaction, return to eDEP and select to "Download a Copy" from the Current Submittals page.



Massachusetts Department of Environmental Protection  
Bureau of Waste Prevention • Air Quality

### **BWP ANF-001 Pre-Form**

Notification Prior to Construction or Demolition

- 
- ☐ This is a revision to an existing form.  
Project ID for existing form to be revised: \_\_\_\_\_
- ☐ This job is being conducted under a Blanket Permit  
MassDEP assigned Blanket Authorization ID: \_\_\_\_\_
- ☐ This job is being conducted under a Non Traditional Abatement Work Practice Permit.  
MassDEP assigned Non Traditional Work Practice Authorization ID: \_\_\_\_\_
- ☐ I am a non-licensed contractor removing or disturbing non-friable shingles only.
- ☒ None of the above conditions apply, generate a new form



# Commonwealth of Massachusetts Asbestos Notification Form ANF-001

100228851

Asbestos Project #

☐ Project Revision☐ Project Cancellation

## A. Asbestos Abatement Description

### 1. Facility Location:

VA MEDICAL CENTER

200 SPRING ST

Name of Facility

Street Address

BEDFORD

MA

01730

7816872783

City/Town

State

Zip Code

Telephone

CALE PUTNAM

VA REPRESENTATIVE - PROJ. ENG

Facility Contact Person Name

Facility Contact Person Title

Worksite Location:

BUILDINGS 9, 10, 17, 70 EXTERIOR WINDOWS

Building Name, Wing, Floor, Room, etc.

Instructions 1. All sections of this form must be completed in order to comply with MassDEP notification requirements of 310 CMR 7.15 and Department of Labor Standards (DLS) notification requirements of 453 CMR 5.12

2. Is the facility occupied? ☒ Yes ☐ No

3. Is this a fee exempt notification (city, town, district, municipal housing authority, state facility, or owner-occupied residential property of four units or less)? ☐ Yes ☒ No

MassDEP Use Only

4. Blanket Permit Project Approval, if applicable:

Approval ID #

Date Received

5. Non-Traditional Asbestos Abatement Work Practice Approval, if applicable:

Approval ID #

2. Submit Original Form To:  
Commonwealth of Massachusetts  
P.O. Box 4062  
Boston, MA 02211

### 6. Asbestos Contractor:

MONUMENT CONSTRUCTION LLC

21 FACTORY ST

Name

Address

NASHUA

NH

03060

6039964578

City/Town

State

Zip Code

Telephone

AC000892

Contract Type: ☒ Written ☐ Verbal

DLS License #

### 7. PEDRO G. PEREZ

AB035527

Name of Contractor's On-Site Supervisor/Foreman

DLS Certification #

### 8. LANCE COTTON

AM000120

Name of Project Monitor

DLS Certification #

### 9. ESIS INC

AA000215

Name of Asbestos Analytical Lab

DLS Certification #

### 10. 10/5/2015

12/24/2015

Project Start Date (MM/DD/YYYY)

End Date (MM/DD/YYYY)

8:00 AM TO 4:30 PM

6:00 AM TO

Work Hours - Monday Through Friday

Work Hours - Saturday &amp; Sunday

11. What type of project is this?

☐ Demolition ☒ Renovation ☐ Repair ☒ Other - Please Specify: WINDOW REPLACEMENT



Commonwealth of Massachusetts  
**Asbestos Notification Form ANF-001**

100228851

Asbestos Project #

☐ Project Revision☐ Project Cancellation**A. Asbestos Abatement Description: (cont.)**

12. Abatement procedures (check all that apply):

☐ Glove Bag ☐ Encapsulation ☒ Enclosure ☐ Disposal Only ☐ Cleanup ☐ Full Containment  
☐ Other - Please Specify: \_\_\_\_\_

13. Job is being conducted: ☐ Indoors ☒ Outdoors

14. Total amount of each type of asbestos Containing materials (ACM) to be removed, enclosed, or encapsulated:

370			5850		
Linear Feet (Lin. Ft.)			Square Feet (Sq. Ft.)		
Boiler, Breaching, Duct,			Transite Pipe		
Tank Surface Coatings	Lin. Ft.	Sq. Ft.		Lin. Ft.	Sq. Ft.
Pipe Insulation			Transite Shingles		
	Lin. Ft.	Sq. Ft.		Lin. Ft.	Sq. Ft.
Spray-On Fireproofing			Transite Panels		
	Lin. Ft.	Sq. Ft.		Lin. Ft.	Sq. Ft.
Cloths, Woven Fabrics			Other - Please Specify:		
	Lin. Ft.	Sq. Ft.			
Insulating Cement			GLAZING (SF), CAULKING (L)	370	5850
	Lin. Ft.	Sq. Ft.		Lin. Ft.	Sq. Ft.

15. Describe the decontamination system(s) to be used:

3 STAGE DECON WITH SHOWER FOR EXTERIOR WORK

16. Describe the containerization/disposal methods to comply with 310 CMR 7.15 and 453 CMR 6.14(2)(g):

DOUBLE 6 MIL PLASTIC BAGS OR WRAPPED BUNDLES, WET METHOD, COMPLETELY SEALED EDGES, PLACED INSIDE APPROVED ASBESTOS WASTE TRAILER. A GENERATOR & #9 ASBESTOS LABEL WILL BE PLACED ON EACH BUNDLE BEFORE IT GOES INTO WASTE TRAILER

17. For Emergency Asbestos Operations, the MassDEP and DLS officials who evaluated the emergency:

Name of MassDEP Official	Title of MassDEP Official
Date of Authorization (MM/DD/YYYY)	Waiver #
Name of DLS Official	Title of DLS Official
Date of Authorization (MM/DD/YYYY)	Waiver #

18. Do prevailing wage rates as per M.G.L. c. 149, § 26, 27 or 27A-F apply to this project? ☒ Yes ☐ No



100228851

☐ Project Cancellation

1. Current or prior use of facility: VA MEDICAL CTR - NON-PATIENT ADMIN OFFICES

2. Is the facility owner-occupied residential with 4 units or less? ☐ Yes ☒ No

3. VA MEDICAL CENTER		540 BELMONT ST., BLDG-3, 4TH FLR. RM B407	
Facility Owner Name		Address	
BROCKTON	MA	02301	7748261573
City/Town	State	Zip Code	Telephone

4. CALEPUTNAM		200 SPRING ST., BLDG 80- ENGINE	
Name of Facility Owner's On-Site Manager		Address	
BEDFORD	MA	01730	7816872783
City/Town	State	Zip Code	Telephone

5. MONUMENT CONSTRUCTION		21 FACTORY ST	
Name of General Contractor		Address	
NASHUA	NH	03060	9783373014
City/Town	State	Zip Code	Telephone

TRAVELERS	
Contractor's Worker's Compensation Insurer DTJUB-OF16468-7-15	7/31/2016
Policy #	Expiration Date (MM/DD/YYYY)

6. What is the size of this facility?	98339	11
	Square Feet	# of Floors

### C. Asbestos Transportation & Disposal

1. Transporter of asbestos-containing waste material from site of generation:

☒ Directly to Landfill or ☐ To Temporary Storage Location/Transfer Station

SERVICE TRANSPORT GROUP		28 FRIMLAGE STREET	
Name of Transporter		Address	
WOONSOCKET	RI	02895	4017661824
City/Town	State	Zip Code	Telephone

2. If a temporary storage location/transfer station is used, list name of transporter of asbestos containing waste material from temporary storage location/transfer station to final disposal site:

Name of Transporter		Address	
City/Town	State	Zip Code	Telephone

**Note:** Temporary storage of Asbestos containing waste material is only allowed at the place of business of a DLS licensed Asbestos contractor or a transfer station that is permitted by MassDEP and operated in compliance with Solid Waste Regulations 310 CMR 19.000

Note: Contractor must \_\_\_\_\_  
sign this form for DLS Revised: 11/13/2013





Commonwealth of Massachusetts  
**Asbestos Notification Form ANF-001**

100228851

Asbestos Project #

☐ Project Revision☐ Project Cancellation

Notification purposes

**C. Asbestos Transportation & Disposal: (cont.)**

3. Name and address of temporary storage location/transfer station for the asbestos containing waste material:

Temporary Storage Location Name	Address
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City/Town	State	Zip Code	Telephone
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4. Name and location of final disposal site (asbestos landfill):

MINERVA ENTERPRISES, LLC	FRANK STUFANO
--------------------------	---------------

Final Disposal Site Name	Final Disposal Site Owner Name
--------------------------	--------------------------------

8955 MINERVA RD S.E.	
----------------------	--

Address	
---------	--

WAYNESBURG	OH	44688	3308663435
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City/Town	State	Zip Code	Telephone
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**D. Certification**

"I certify that I have personally examined the foregoing and am familiar with the information contained in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment. The undersigned hereby states that I have read the Commonwealth of Massachusetts regulations governing asbestos abatement (453 CMR 6.00 promulgated by the Department of Labor Standards and 310 CMR 7.15 promulgated by the Department of Environmental Protection), and that I am aware that this permit application or notification shall not be deemed valid unless payment of the applicable fee is made."

TIMOTHY IGNACIO

Name
CONSTRUCTION MANAGER

Position/Title
9783373014

Telephone
21 FACTORY STREET

Address
NH

State
-------

TIMOTHY IGNACIO

Authorized Signature
9/15/2015

Date (MM/DD/YYYY)
MONUMENT CONSTRUCTION, LLC

Representing
NASHUA

City/Town
03060

Zip Code
----------



ESIS, Inc.  
Health, Safety &  
Environmental Services  
33 Arch Street  
Suite 2900  
Boston, MA 02110

617.737.8928 tel  
781.974.9606 cel  
617.737.8971 fax

brian.hanlon@esis.com  
[www.esis.com](http://www.esis.com)

September 10, 2015

**ASBESTOS ABATEMENT WORK PLAN**

RE: Edith Nourse Rogers Memorial Veterans Hospital – 200 Springs Road, Bedford, MA 01730 – Replacement Window at VAMC - Exterior Building Caulking/Glazing Removal in Buildings 9, 10, 17 & 70 – Project Number: VA241-12-R-0421

Asbestos Abatement Contractor: Monument Construction, LLC

**WORK PROCEDURES:**

Asbestos removal will not begin until the on-site Industrial Hygienist has given authorization to proceed.

This work is to take place at the Edith Nourse Rogers Memorial Veterans Hospital on the exterior of Buildings 9, 10, 17 & 70 located in Bedford, MA. The project shall consist of the following:

- **Abatement in Building 9** including (68) metal frame, double hung window sashes with ACM glazing, (32) metal frame awning style window sashes with ACM glazing, and (18) wooden frame double hung windows with ACM glazing on sash.
- **Abatement in Building 10** including (6) large, wood frame double hung windows with ACM caulking at frame/building interface.
- **Abatement in Building 17** including (49) wood frame, double hung window sashes with ACM glazing, (8) wood frame awning style window sashes with ACM glazing.
- **Abatement in Building 70** including (138) metal frame double hung window sashes with ACM glazing, and (19) metal frame awning style window sashes with ACM glazing.

Asbestos Abatement work activities will be schedule to be conducted off-hours of normal daily VA campus business hours. However, as required, abatement activities may and will occur during normal, daily construction work hours.

**Asbestos Abatement Work Plan**  
**Edith Nourse Rogers Memorial Veterans Hospital**  
**200 Springs Road**  
**Bedford, MA 01730**

*ESIS, Inc. – Health, Safety & Environmental*  
*ESIS Project Number: 00010.76.840*

**Part I: Preparation of the Work Areas:**

Monument Construction, LLC shall isolate the designated work area from all occupied areas and areas not being affected by the work by putting asbestos hazard caution tape around the regulated area of where the abatement is going to take place. The windows shall be sealed with (2) layers of 6-mil fire retardant polyethylene sheeting on the interior space of the window so as to not allow any dust migration into the building interior as the caulking/glazing windows are removed. Any moveable objects within the window opening/return shall be moved prior to poly application. The exterior area shall be cordoned off with Asbestos/Danger barrier tape and OSHA Danger demarcation signs at least twenty feet out from the building surroundings. Any ducts, grates, openings or windows of the floor directly below or on the same floor and directly adjacent shall be covered in 6 mil clear polyethylene sheeting. All of the scheduled windows to be removed on the exterior of the building will be removed from the exterior. Any residual caulking between the building and window frame shall be wetted, scraped, and removed. The entire window casements shall be removed and wrapped in (2) layers of 6-mil fire retardant polyethylene clear sheeting, labeled and disposed of properly. Two (2) layers of 6-mil polyethylene will cover the ground and extend from 10' on the outside of buildings 9, 10, 17 & 70 during the removal of the exterior windows. A remote two stage decontamination chamber shall be established inside of the temp barrier cordoned work area. A three stage decontamination unit shall contain a clean room, shower and a dirty room that can store equipment being used on the exterior caulking/glazing abatement. The three stage decontamination unit shall be constructed of at least 3 layers of 6 mil fire retardant poly to provide an air tight room. During off-hours, the decontamination unit shall be locked to restrict entry and placed in Monument's on-site storage unit. Additionally, Monument will have a temporary (short-term), gas fired back-up generator stored on-site in case of emergency need.

The exterior caulking/glazing shall be adequately wetted and placed in asbestos containers or asbestos disposal bags, double bagged by hand and carefully lowered to the ground if the work is to take place at an elevation. Asbestos bags shall not be dropped to the ground. Asbestos shall be appropriately bagged/double bagged and lowered to the ground and shall be stored in an enclosed waste container.

All asbestos abatement work performed on this project shall comply with the Commonwealth of Massachusetts Department of labor and Workforce Development 453 CMR 6.00 Removal, Containment or Encapsulation of Asbestos; Massachusetts Department of Environmental Protection 310 CMR 7.15; Environmental Protection Agency 40 CFR Part 61 National Emission Standards for Hazardous Air Pollutants (NESHAP); U.S. Department of Labor Occupational Safety and Health Administration (OSHA) Asbestos Standard for the Construction Industry 29 CFR 1926.1101 Asbestos.

**Asbestos Abatement Work Plan**  
**Edith Nourse Rogers Memorial Veterans Hospital**  
**200 Springs Road**  
**Bedford, MA 01730**

*ESIS, Inc. – Health, Safety & Environmental*  
*ESIS Project Number: 00010.76.840*

**Part II: Removal and Disposal:**

All contaminated construction debris generated from any demolition to access activities shall be double bagged with asbestos waste bags. All bags or wrapped materials transported out of the work area shall be labeled with pre-printed labels required by Federal EPA, OSHA and the Department of Transportation regulations. The name of the waster generator (Owner) and the project address shall also be placed on each bag or wrapped material. All bagged and/or wrapped materials shall be removed from the work area daily and stored on-site in an appropriate asbestos waste trailer for transportation to an approved landfill. The actual landfill name and carrier can be found in the asbestos waste shipment record. The asbestos abatement contractor will sign and certify all asbestos abatement records.

**Part III: Demolition of Existing Windows containing lead paint:**

**Removal:** Monument Construction will be self-performing the removal of the existing windows. A portion of the windows have been identified to have been painted and contain lead paint under OSHA's Lead Standard for the Construction Industry, Title 29 CFR 1926.62 of Federal Regulations. Monument Construction will utilize lead safe work practices including: Worker Protection Programs, Collection of Exposure Samples and Assessments, Engineering Controls, Housekeeping and Personal Hygiene and Personal Protective Equipment (PPE). All workers will be wearing their personal protective equipment (PPE) at all times during all existing window removal operations. During the demolition Monument Construction will have a competent person present.

**Exposure Assessment:** Initial personal air monitoring shall be conducted to determine the potential airborne concentrations of lead for this project. Personal air samples shall be collected from each job function to determine the airborne lead dust concentration in the workers breathing zone. Results shall be reported in milligrams per cubic meter ( $\text{mg}/\text{m}^3$ ) and compared to the OSHA Action Level (AL) of  $0.03 \text{ mg}/\text{m}^3$  and OSHA Permissible Exposure Limit (PEL) of  $0.05 \text{ mg}/\text{m}^3$ .

Monument Construction shall enforce all aspects of its standard written respiratory program. The competent person will ensure that the appropriate respiratory protection, which meets the required protection factor associated with the work, and to be worn during all phases of the project.

**Asbestos Abatement Work Plan**  
**Edith Nourse Rogers Memorial Veterans Hospital**  
**200 Springs Road**  
**Bedford, MA 01730**

*ESIS, Inc. – Health, Safety & Environmental*  
*ESIS Project Number: 00010.76.840*

#### **Part IV: Respirator Fit Testing:**

Each asbestos worker and supervisor shall be fit tested by a supervisor or a competent person generally using the acceptable qualitative and quantitative fit testing procedures. Each worker and supervisor shall adequately pass the selected fit test procedure every **six months**. Fit tests shall not be self-conducted. Fit test documentation shall be signed by both the person being fit tested and the person performing the fit test.

#### **Part V: Air Sampling:**

The Industrial Hygienist will provide PCM air sampling that will be performed continuously outside the isolated work area during all removal and decontamination activities. ESIS will be using the Air Sample Data Form which will have the air flow rate (LPM) start, stop & average, sampling start & stop time, total (Minutes) and Volume (L) for each air sample taken during the project. All final air clearances will have a volume of 1,200 liters/sample.

Lance R. Cotton from ESIS is the Project Manager who will be the Contractor's Professional Hygienist (CPIH) overseeing the project.

Additionally, the workers OSHA personal air samples will be utilized for exposure determination for work inside the containment area. Personal air samples of at least 25% of the workers but not less than two shall be taken on each working shift. All asbestos abatement workers shall be subject to and required to comply with OSHA personal sampling for compliance with OSHA 29 CFR 1926.1101 – Asbestos.

#### **PERMISSIBLE EXPOSURE LIMITS (PELs)**

- Time-Weighted Average (TWA) – The employer shall ensure that no employee is exposed to an airborne concentration of asbestos in excess of 0.1 fiber per cubic centimeter (0.1f/cc) as averaged over an 8-hour TWA day.
- Excursion Limit (EL) – The employer shall ensure that no employee is exposed to an airborne concentration of asbestos in excess of 1.0 fiber per cubic centimeter of air (1f/cc) as averaged over a sampling period of 30 minutes.

**Asbestos Abatement Work Plan  
Edith Nourse Rogers Memorial Veterans Hospital  
200 Springs Road  
Bedford, MA 01730**

*ESIS, Inc. – Health, Safety & Environmental  
ESIS Project Number: 00010.76.840*

All PCM air sample results shall be submitted to the VA for review prior to the removal of any barriers.

## **LEVELS OF PROTECTION AND PERSONAL PROTECTIVE EQUIPMENT FOR SITE ACTIVITIES**

### **Personal Protective Equipment**

Personal protective equipment (PPE) is one of the major methods used to minimize potential employee exposure to site contamination. PPE will be used when other means of controlling the hazard are not effective, or as an interim measure. The levels of protection for on-site personnel have been based on OSHA requirements. All personnel on-site shall have their own personal protective equipment (PPE) that will be used according to the direction of the SSO.

All PPE shall be kept cleaned and maintained in a proper manner. Personnel will have been trained in the proper use and maintenance of PPE. It is the responsibility of the asbestos abatement contractor to supply and maintain all required PPE for their employees in a usable fashion. Subcontractors and site visitors are required to provide their own PPE consistent with the requirements of this Health and Safety Plan (HASP).

At a minimum, all workers and visitors will be required to have hardhats and steel toe safety shoes or boots whenever on-site. PPE as prescribed in this plan shall be worn on-site at all times. Loose sleeves, cuffs, loose clothing, ties, or any other objects that may become entangled in machinery will not be permitted on the job site. Reflective vests will be used whenever working in or around automotive traffic.

OSHA has implemented a standard on personal protective equipment (PPE), 29 CFR 1910.132. This standard defines approved types of PPE for eye, face, head, and foot protection. The appropriate types of PPE shall be designated for the hazards of the particular task. All PPE shall comply with the appropriate ANSI designation as referenced in the standard.

Based on the information provided in the site characterization reports, controls will be implemented to reduce the potential for personnel to be exposed to contaminants at levels above the OSHA Permissible Exposure Limits (PELs), ACGIH Threshold Limit Values (TLVs), or encounter conditions which are Immediately Dangerous to Life and Health (IDLH).

**Asbestos Abatement Work Plan**  
**Edith Nourse Rogers Memorial Veterans Hospital**  
**200 Springs Road**  
**Bedford, MA 01730**

*ESIS, Inc. – Health, Safety & Environmental*  
*ESIS Project Number: 00010.76.840*

### **Air Monitoring for Worker Protection**

The Asbestos Abatement Contractor shall conduct air monitoring of the identified contaminants in two distinct fashions. Personal air sample monitoring will be performed continuously throughout the project to ensure that the appropriate level of personal protective equipment (PPE) is being used. This will be accomplished by having 25% of workers representing each of the job tasks wear a low flow personal pump that extends into their breathing space. Attached to the pump is a 25 mm mixed cellulose ester cassette that will be analyzed via NIOSH 7400 method. The results will then be used to calculate a Time Weighted Average (TWA) for the workers exposure. This methodology is specific to OSHA 29 CFR 1910.1001 Occupational Safety and Health Standards (b) Definitions and Exposure Monitoring (d). If the final air clearance exceeds 0.01f/cc, then additional respiratory protection will be required. This additional protection will be the required use of Powered Air Purifying Respirators (PAPRs) by the asbestos abatement workers (OSHA 1910.134 Respiratory Protection). This will be required until subsequent measures have been introduced to reduce the elevated levels and there is personal air sampling data available to validate the reflected change.

The second type of air monitoring will be perimeter monitoring at four points (if possible) around the work area. This will be used to determine if there is any off site migration airborne asbestos fibers. This air sampling will be performed by an entity separate from the asbestos abatement contractor (Independent Industrial Hygienist). The air sampling will be the same process as the personal air sampling except that high flow pumps will be used instead of the low flow pumps (where possible).

If elevated levels or visible emissions are encountered, work will be halted and the Project Engineer and Owner shall be notified and additional engineering controls shall be considered and implemented to reduce and/or eliminate the elevated readings and or visible emissions.

### **Emergency Medical and Fire Response**

When an emergency occurs, decisive actions are required. Hastily made choices may have far-reaching long-term consequences. Delays or even seconds can create life threatening situations.

Personnel must be ready to respond to emergency situations immediately. All personnel should know their own responsibilities during an emergency. The personnel should know who is in charge during an emergency and know the extent of that person's authority. This section outlines personnel roles, lines of authority, and communication procedures to be followed during emergencies.

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In the event of an emergency situation at a project site, the Site Supervisor will assume total control and will be responsible for on-site decision making. This individual has the authority to resolve all disputes about health and safety requirements and precautions. They will also be responsible for coordinating all activities until emergency response teams (ambulance, fire, police, etc.) arrive on-site. In addition, the Site Project Manager will be contacted as soon as possible.

All on-site personnel must know the location of the nearest telephone and the location of the emergency telephone number list next to all phones.

In the event of a personal injury:

- Field team members trained in first aid can administer treatment to an injured worker. The victim should be transported to the nearest hospital or medical center if necessary; an ambulance should be called to transport the victim as required.
- The Site Supervisor is responsible for the completion of an Accident Report Form.

### **Fire or Explosion**

In the event of a fire or explosion, personnel will evacuate the area immediately and administer necessary first aid to injured employees. Personnel will proceed to a safe area and telephone the emergency support services. Upon contacting the emergency support services, the caller should state his/her name, nature of hazard (fire, high combustible vapor levels, etc.), the location of the incident, and whether there were any physical injuries requiring an ambulance. Do not hang up the phone until emergency support services have all the additional information they may require. The Site Project Manager will be contacted as soon as possible by radio or phone.

### **Emergency Contacts**

In the event of any situation or unplanned occurrence requiring assistance, the appropriate contact (s) should be made from the list as provided in the appropriate submittal. For emergency situations, telephone or radio contact should be made with the site point of contact or site emergency personnel who will then contact the appropriate response teams.



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**REFERENCES:**

Comply with applicable requirements of the following standards. Where these standards conflict with other specified requirements, the most restrictive requirements shall govern.

1. Environmental Protection Agency  
National Emission Standards for Hazardous Air Pollutants (NESHAP) Title 40 CFR Part 61, as currently amended. Guidance for Controlling Friable Asbestos-Containing Materials in Buildings, Final Rule and Notice
2. Occupational Safety and Health Administration (OSHA) Title 29 CFR 1910.1001 (amended) and Title 29 CFR 1910.1101
3. Commonwealth of Massachusetts  
Department of Labor Workforce and Industries  
453 CMR 6.00: The Removal, Containment or Encapsulation of Asbestos
4. Commonwealth of Massachusetts  
Department of Environmental Protection  
Final Amendments of 310 CMR 7.15: Asbestos
5. Environmental Protection Agency  
EPA 560/5-85-024; Purple Book
6. U. S. Department of Transportation Regulations 49 CFR Parts 172 & 173

**REQUIRED DOCUMENTATION:**

The following is a list of all documents required to be on-site throughout the asbestos abatement project:

1. Copies of all notifications, permits, applications, licenses, and like documents required by federal, state, or local regulations obtained or submitted in proper fashion;
2. Copies of Asbestos Abatement Contractor's Department of Labor Standards (DLS) Commonwealth of Massachusetts Licenses;
3. Proof of the asbestos abatement supervisor's certification and training, including the most recent initial/refresher course completed and current Department of Labor Standards (DLS) Commonwealth of Massachusetts Licenses;

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4. Proof of each asbestos abatement worker's certification and training, including the most recent initial/refreshers course completed and current Department of Labor Standards (DLS) Commonwealth of Massachusetts Licenses;
5. Proposed respiratory protection program for employees throughout all phases of the project, including make, model and NIOSH approval numbers of respirators being used;
6. Proof that the asbestos abatement supervisor and workers have been fit tested within the past twelve months for using a negative pressure respirator equipped with HEPA filter cartridges;
7. Proof that the asbestos abatement supervisor and workers have been examined by a qualified physician within the past twelve months, and are capable of wearing respiratory protection and are able to perform asbestos abatement work and other related activities;
8. Chain of Command of responsibility at the work project site including supervisors, foreman, competent person, and their names and resumes;
9. Proposed Emergency Plan and route of egress from the work area in case of a fire or injury, including the name, directions/map and phone number of the nearest medical assistance center;
10. The name and address of the Asbestos Abatement Contractor's personal air monitoring and testing laboratory including certification of Massachusetts Department of Labor Standards (DLS) accreditation and proof of an AIHA PAT or AAR Proficiency Program;
11. An MSDS or equivalent, in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200) for all products and materials proposed for use on this project. Include a separate attachment for each sheet indicating the specific worker protective equipment proposed for use with the material indicated. A copy of the Asbestos Abatement Contractor's complete OSHA Hazard Communication Standard will also be submitted and be kept on-site at all times;
12. A current negative exposure assessment in accordance with OSHA 1926.1101 providing recent data (less than six months old) showing personal exposures to airborne asbestos for comparable workers. This data must show workers' exposures to airborne asbestos on an 8-hour time weighted average (TWA) basis that are less than 0.1 fibers cubic centimeter of air (f/cc); and

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13. Name, address, and ID number of the asbestos waste hauler, and proposed disposal site.

Upon completion of the asbestos abatement project submit the following to the Owner and Designer for approval:

1. All manifest and landfill receipts detailing disposal of all asbestos and asbestos-containing waste materials generated by the work;
2. All analytical results of personal air samples collected in accordance with OSHA regulations to verify that the 8-hour time weighted average (TWA) concentrations of asbestos fibers in the breathing zone of the workers has not exceeded the permissible exposure limit (PEL) of 0.1 f/cc; and
3. A notarized copy of the entry/exit logbook.

**SPECIAL CONSIDERATIONS:**

Be responsible for securing all necessary permits for asbestos related work, including hauling, removal, and disposal, building, fire, and materials usage, or any other permits required to perform the specified work.

Pay all licensing fees, royalties, and other costs necessary for the use of any copyrighted or patented product, design, invention, or process in the performance of the job specified herein. The Asbestos Abatement Contractor shall be solely responsible for costs, damages, or losses resulting from any infringement of these patent rights or copyrights.

Hold the Owner, the Designer, and the on-site Industrial Hygienists harmless from any costs, damages, and losses resulting from any infringement of these patent rights or copyrights.

If the Scope of Work requests the use of any product, design, invention, or process that requires a licensing fee or royalty fee for use in the performance of the job, the Asbestos Abatement Contractor shall be responsible for the fee or royalty fee and shall disclose the existence of such rights.

Be responsible for costs of all licensing requirements, where applicable, and notification requirements and all other fees related to the Asbestos Abatement Contractor's ability to perform the work in this section.

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**SECURITY:**

1. The Owner will provide specific access as required during the project to the Asbestos Abatement Contractor and personnel assigned to the project. The Owner shall determine access. The Asbestos Abatement Contractor will be responsible for the security of the section of the building involved in the asbestos abatement project. It will also be the Asbestos Abatement Contractor's responsibility to allow only authorized personnel into the work area, and to secure all assigned entrances and exits at the end of the workday. Authorized personnel include licensed Asbestos Abatement Contractor staff, industrial hygienist, and all other personnel with the appropriate training, medical approval, respirator fit testing, and personal protective equipment.
2. Any person entering or exiting the contained areas must sign the Asbestos Abatement Contractor's bound log book and enter the date and time. The logbook must be located immediately outside the entrance to the decontamination unit at all times.

**MATERIALS AND EQUIPMENT:**

The Asbestos Abatement Contractor shall provide new materials and new or used equipment in undamaged and serviceable condition. Only materials and equipment that are recognized as being suitable for the intended use, by compliance with appropriate standards, are to be used during this project.

**1. Fire Extinguishers:**

Provide multi-purpose ABC minimum rating to A4OBC fire extinguishers. The Asbestos Abatement Contractor shall comply with the applicable recommendations of NFPA Standard 10 "Standard for Portable Fire Extinguishers." Fire extinguishers shall be located where they are most convenient and effective for their intended purpose, but provide not less than one extinguisher inside each work area in the equipment room and one outside each work area in the clean room.

**2. Plastic Sheeting:**

Provide non-combustible, fire-retardant, 6-mil clear polyethylene sheeting, frosted, or black plastic sheeting in the largest size possible to minimize seams. Spray plastic will not be allowed for the use on the project.

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**3. Adhesive Materials:**

Provide duct tape in 2" or 3" widths, with an adhesive that is formulated to aggressively stick to the plastic sheeting. The Asbestos Abatement Contractor may also provide spray adhesive in aerosol cans that is specifically formulated to stick tenaciously to the plastic sheeting.

**4. Shower Assembly:**

The Asbestos Abatement Contractor shall provide a leak tight shower enclosure with integrated drain pan fabricated from fiberglass or other durable waterproof material, approximately 3' x 3' square with a minimum of 6' high sides and back. The Asbestos Abatement Contractor shall structurally support the unit as necessary for stability and equip it with a hose bib, mounted at approximately 4' above the drain pan.

Provide a factory made showerhead producing a spray of water, which can be adjusted for spray size and intensity. Feed shower with water mixed from hot and cold supply lines, arranged so that control of water temperature, flow rate, and shutoff is from inside the shower without outside aid.

Provide a totally submersible waterproof sump pump with an integral float switch. The unit shall be sized to pump two times the flow capacity of all showers or hoses supplying water to the sump, through the filters specified herein when they are loaded to the extent that replacement is required. The unit shall be capable of pumping debris, sand, plaster or other materials washed off during decontamination procedures without damage to the mechanism of the pump. Adjust float switch so that a minimum of 3" remains between top of liquid and top of a sump pump.

**5. Negative Air Filtration System:**

The Asbestos Abatement Contractor shall provide air filtering equipment capable of filtering particles to 0.3 micrometers at 99.97% efficiency and of sufficient quantity and capacity to cause a complete air change within the work area at least once every 15 minutes. Such equipment shall exhaust the filtered air so as to maintain a negative pressure inside the work area. Air shall flow through the decontamination unit and exhaust through the negative air filtration unit by means of flexible duct leading outside the work area, preferably outside of the

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building. Negative air filtration shall be in operation at all times during the asbestos abatement project.

**6. HEPA Vacuum:**

The Asbestos Abatement Contractor shall utilize high efficiency filter vacuums to filter particles of 0.3 micrometers or larger at 99.97% efficiency or greater. The Asbestos Abatement Contractor shall obtain HEPA vacuum attachments, such as various size brushes, crevice tools, and angular tools to be used for varied applications, and to service the HEPA vacuum routinely to assure proper operation. Caution shall be used any time the HEPA vacuum is opened for HEPA filter replacement or debris removal. Operators shall wear personnel protective equipment (PPE) when using the HEPA vacuum. Vacuuming by conventional means is unacceptable.

**7. Amended Water:**

For wetting prior to disturbance of asbestos-containing materials, the Asbestos Abatement Contractor shall use an amended water solution. The Asbestos Abatement Contractor shall provide water to which a surfactant has been added. The Asbestos Abatement Contractor shall use a mixture of surfactant and water, which results in wetting of the asbestos-containing material and retardation of fiber release during disturbance of the material, equal to or greater than that provided by the use of one ounce of a surfactant, consisting of 50% polyoxyethylene ester and 50% polyoxyethylene ether mixed with five gallons of water.

**8. Disposal Bags:**

The Asbestos Abatement Contractor shall provide appropriately labeled 6-mil black leak tight bags of sufficient size of application.

**9. Water Services:**

All temporary water connections to the Owner's water system shall include back flow protection. The Asbestos Abatement Contractor shall provide heavy duty abrasion resistant hoses with a pressure rating greater than the maximum pressure of the water distribution system to provide water into the work area and

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to the decontamination unit. The Asbestos Abatement Contractor shall provide a UL rated 5-gallon electric hot water heater to supply hot water for each decontamination shower.

Reviewed by:  
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